

JA



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,335	06/23/2003	Rex Allen Morgan	839-1402	6607
30024	7590	02/16/2005	EXAMINER	
NIXON & VANDERHYE P.C./G.E. 1100 N. GLEBE RD. SUITE 800 ARLINGTON, VA 22201			CASAREGOLA, LOUIS J	
			ART UNIT	PAPER NUMBER
			3746	

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/600,335	Applicant(s) MORGAN ET AL.	
	Examiner Louis J. Casaregola	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
 4a) Of the above claim(s) 19-22 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16, 18 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☒ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/23/03 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input checked="" type="checkbox"/> Other: <u>Reasons for Allowanc</u> |

Restriction Requirement

Restriction to one of the following inventions is required under 35 USC 121:

I. Claims 1-18 drawn to a method of controlling a gas turbine classified in Class 60, subclass 703, and

II. Claims 19-22 drawn to apparatus for controlling a gas turbine classified in Class 60, subclass 39.281.

The inventions of Groups I and II above are distinct because the method of Group I could be practiced using apparatus materially different than that of Group II. The claimed method does not require a controller with a programmed processor as specified in the claimed apparatus -- the method could be practiced either with simple mechanical control means or by way of manual control steps performed by a plant operator.

Because these inventions are distinct for the reasons given above and require separate classification and/or divergent fields of search, restriction for examination purposes as indicated is proper.

On 2/8/05, applicants' attorney, Mr. Jeffry Nelson, elected the invention of Group I, claims 1-18. An action on the merits of these claims is set forth below, and non-elected claims 19-22 are withdrawn from further consideration.

Objections To Drawing

The drawing is objected to under 37 CFR 1.84(p) for inconsistent use of reference characters. Figure 3 improperly labels two different elements with reference character "62". These elements should each have a different reference character, and it appears that the uppermost of the two elements 62 is actually intended to be element "60" described on page 11 of the specification. Applicants are required to submit appropriate drawing corrections.

Objections To Claims

Claim 17 is objected to under 37 CFR 1.75(a) for the following reasons:

Claimed reference to "the compressor condition" lacks antecedent basis', and additional reference to a "compressor pressure ratio" appears to be redundant with the limitations in parent claim 10 (see item "a"). Unless applicants can demonstrate that claim 17 has a further limiting effect beyond that of claim 10, claim 17 should be canceled.

Allowable Subject Matter

Claims 1-16 and 18 are allowed. Allowance of the present applicant is


contingent upon canceling the non-elected claims as well as overcoming the objection set forth above.

Reasons For Allowance

The invention in this case is a method for determining a target exhaust gas temperature for a gas turbine engine. It is well known for gas turbines to employ turbine exhaust temperature as a control parameter. An actual value of exhaust temperature is compared with a target value and engine control variables, such as fuel flow, are adjusted to make the actual value equal the target value. The patents cited on Form PTO-892 (Loft et al, Howell et al, Martin, and Mirsky et al) all disclose control systems that operate in this manner. None of the references of record, however, disclose or fairly suggest a gas turbine control system that determines a target exhaust temperature based on compressor pressure conditions and then adjusts that target temperature in response to specific humidity, inlet pressure loss, or turbine back pressure as specified in the present claims. The claimed invention is therefore considered patentable over the prior art.

Art Unit: 3746

L. J. Casaregola
571-272-4826 (M-F; 7:30-4:00)
703-872-9306 FAX
February 9, 2005


LOUIS J. CASAREGOLA
PRIMARY EXAMINER

If repeated attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor, Cheryl Tyler, can be reached at 571-272-4834.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).